

### Trends among MSM

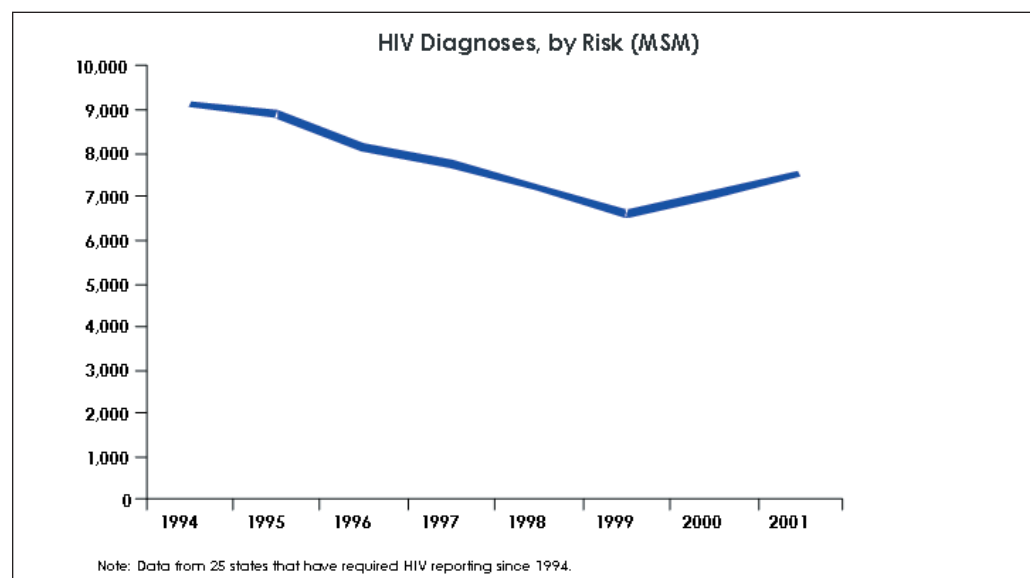
HIV-related illness and death have had a devastating effect on MSM. Despite dramatic decreases in AIDS incidence in this population, MSM continue to account for the largest number of people reported with AIDS each year. Research suggests that some MSM are less concerned now than in the past about becoming infected and may be inclined to take more risks. This trend is backed up by reported increases in other sexually transmitted diseases among MSM in several large US cities and elsewhere.

#### AIDS

MSM accounted for nearly half (40%) of all AIDS cases in men and women (including adolescents) diagnosed in 2001. In that year alone, 16,453 AIDS cases in MSM were diagnosed, compared with 7,280 cases in men who acquired their infection through injection drug use, 4,555 through sex with women, and 1,839 through having sex with men and injecting drugs.

#### HIV

Data from the 25 states with long-standing HIV reporting show that new HIV diagnoses in MSM declined from 1994 through 1999 and then began to rise. The increase since 1999 may be the result of more people being tested, or it may represent new infections. More data are needed to help explain this increase.



HIV-related illness and death have had a devastating effect on MSM.

## How Are They Affected?

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Data reported from 39 areas with confidential HIV reporting indicate that MSM still represent the largest proportion of new HIV cases for which risk is known (32%), compared with IDUs (8%), men who have sex with women (6%), and MSM who inject drugs (3%).

Preliminary data from a 1998–2000 study of young MSM aged 23–29 years in 6 US cities showed high incidence (number of new infections) of HIV, especially among blacks in their 20s. Overall incidence was 4.4% (whites, 2.5%; Hispanics, 3.5%; and blacks, 14.7%). These findings, in conjunction with other recent findings on sexually transmitted diseases and sexual behaviors, may suggest a resurgent HIV epidemic among MSM in the late 1990s.

### Examples of CDC Programs and Research for MSM

Programs for MSM face the challenge of cultural barriers, including the stigma associated with gay and bisexual activity, especially in black, Hispanic, and other communities of color. Research, however, has shown several types of interventions to be effective for reducing HIV transmission among MSM.

Interventions found to be effective for MSM include

- ▲ small group lectures on HIV transmission
- ▲ training on negotiating condom use and communicating about safer sex
- ▲ training popular MSM opinion leaders to promote safer sex

One of CDC's HIV Prevention Strategic Plan objectives for this population is to increase among MSM the proportion who consistently engage in behaviors that reduce risk for HIV acquisition or transmission.

CDC activities that address these objectives include

- ▲ **Joint Internal CDC Workgroup.** This group developed a Nine-Point MSM Plan, which focuses on prevention strategies for reaching MSM.
- ▲ **Young MSM Consultation.** Experts provided recommendations for HIV prevention, counseling and testing, access to care, and development of comprehensive strategies for young MSM.
- ▲ **Supplemental Targeted Funding for MSM Programs.** These funds went directly to organizations working on HIV prevention for MSM.
- ▲ **Supplemental Funds to HIV/AIDS Surveillance.** Among the chosen activities for this funding were behavioral surveillance and evaluation of prevention efforts aimed at reducing HIV incidence among young MSM.

### Programs

CDC provides 104 awards to directly funded CBOs that focus primarily on MSM and provides indirect funding through state, territorial, and local health departments to organizations serving MSM. Of these 104 awards, 54% focus on blacks; 33%, Hispanics; 7%, Asians/Pacific

One of CDC's HIV Prevention Strategic Plan objectives for this population is to increase among MSM the proportion who consistently engage in behaviors that reduce risk for HIV acquisition or transmission.

## How Are They Affected?

Islanders; 5%, whites; and 2%, American Indians/Alaska Natives. In terms of age groups, 29% focus on adults; 19%, youth; and 1%, elderly people.

### Research

#### ***Brothers y Hermanos***

This 4-year study will examine (among other things) psychological, social, cultural, and environmental factors associated with HIV risk behavior among black and Latino MSM in Los Angeles, New York City, and Philadelphia.

#### ***Development of prevention messages for MSM***

These 3 studies will assess attitudes toward potential HIV risk-reduction practices, knowledge of scientific developments, and potential effectiveness of prevention measures focused on risk perceptions and behavioral intentions.

#### ***Substance-using MSM***

This behavioral intervention targets the sexual risk behavior associated with substance use among MSM (with and without HIV infection) who use alcohol and other drugs but do not inject drugs. This intervention is being tested in a randomized controlled trial with ethnically diverse participants in 4 major US cities.



### Trends among IDUs

Drug injection was identified as a risk factor for HIV/AIDS early in the epidemic. HIV is transmitted among IDUs who share injection drug equipment or have unprotected sex with an infected partner.

#### AIDS

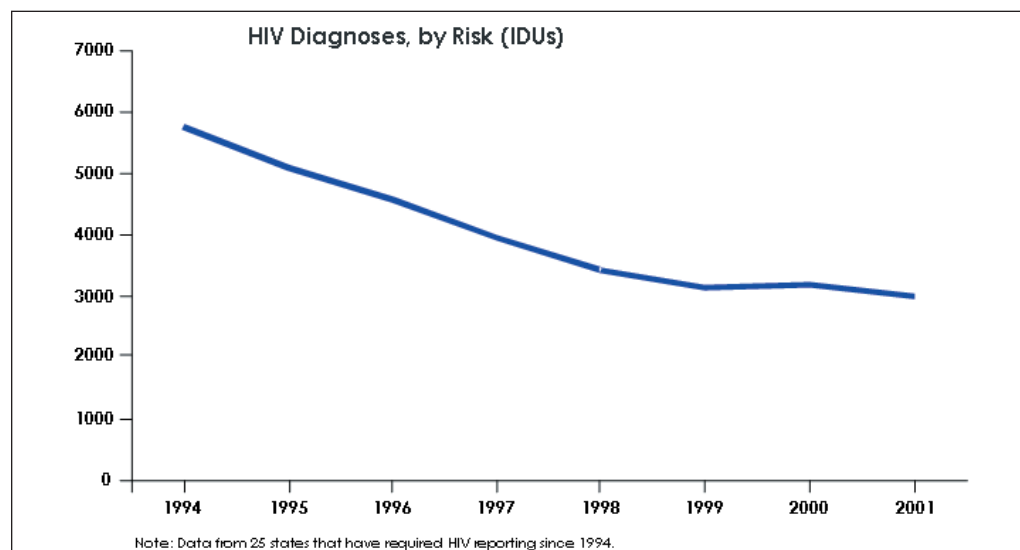
Since the beginning of the epidemic, injection drug use has directly or indirectly accounted for more than one-third (36%) of AIDS cases in the United States. This association appears to be continuing. Of all new cases of AIDS reported in 2001 alone, more than one-quarter (25%) were in IDUs.

Racial and ethnic minority populations are most heavily affected. In 2001, injection drug use alone accounted for 30% of all AIDS cases in black men and women and 30% of all AIDS cases in Hispanic men and women, compared with only 17% in white men and women.

Among women, injection drug use accounts for a larger proportion of AIDS cases than it does among men. Since the epidemic began, 55% of all AIDS cases in women have been attributed to injection drug use or sex with partners who inject drugs, compared with 31% in men.

#### HIV

The good news is that new HIV diagnoses seem to be declining overall among IDUs, with a 48% decrease in new HIV diagnoses from 1994 through 2001 in the 25 states with long-standing HIV reporting.



Since the beginning of the epidemic, injection drug use has directly or indirectly accounted for more than one-third (36%) of AIDS cases in the United States.

## How Are They Affected?

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However, injection drug use itself may be on the rise, especially in suburban and rural areas. The only age group of IDUS in which new HIV diagnoses have not decreased or leveled off is age 50 and older. For these IDUS, new diagnoses decreased slightly but then stabilized from 1999 through 2000.

Black male IDUS are disproportionately affected. Among IDUS who received an HIV diagnosis during 1994–2000, 64% were black men. This is consistent with the disproportionate effect of the HIV/AIDS epidemic overall on communities of color and with the fact that most IDUS are male.

### Examples of CDC Programs and Research for IDUs

Preventing the spread of HIV through injection drug use requires several approaches, including programs to prevent initiation of drug use, substance abuse treatment programs, education about HIV prevention, and access to sterile needles and syringes (where legal) for those who are unwilling or unable to stop injecting.

Interventions found to be effective with IDUs include

- ▲ skills building for heterosexual women receiving methadone treatment
- ▲ problem-solving therapy models for incarcerated male adolescent IDUs
- ▲ training to reduce sexual and drug-related HIV risk behaviors for IDUs receiving treatment for substance abuse

One of CDC's HIV Prevention Strategic Plan objectives for this population is to increase among IDUs the proportion who abstain from drug use or, for those who do not abstain, to use harm-reduction strategies to reduce risk for HIV acquisition or transmission.

CDC activities that address these objectives include

- ▲ **Supplemental Funds to HIV/AIDS Surveillance.** These funds are used to assess HIV risk behaviors and trends in behaviors among IDUs in metropolitan areas.
- ▲ **Supplement to the *Journal of the American Pharmaceutical Association* (November-December 2002).** This issue, authored by CDC experts and others, highlights pharmacy and public health cooperation to increase pharmacy syringe sales to IDUs who are unable or unwilling to stop injecting and to promote safe syringe disposal. CDC recognizes the role of access to sterile injection equipment as a component of comprehensive HIV prevention for IDUs but does not fund such efforts.
- ▲ **REP (Replicating Effective Programs).** This *prevention in a box* project takes interventions proven effective with specific populations, including IDUs, and packages them into kits for use by local HIV prevention agencies.

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## How Are They Affected?

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### Programs

CDC provides 57 awards to directly funded CBOs that focus primarily on IDUs. Of these 57 awards, 58% focus on blacks; 33%, Hispanics; 8%, Asians/Pacific Islanders; 6%, whites, and 3%, American Indians/Alaska Natives. In terms of age groups, 40% focus on adults; 14%, youth; and 2%, elderly people.

### Research

#### ***INSPIRE (Interventions for HIV-Seropositive IDUs—Research and Evaluation)***

CDC and the Health Resources and Services Administration jointly funded INSPIRE in late 1999 as a 5-year study trying to link prevention and treatment in each of 4 cities (Baltimore, Miami, New York, and San Francisco). The intervention consists of 10 sessions that focus on building cognitive-behavioral skills and encouraging participants to mentor their peers.

#### ***DUIT (Drug Users Intervention Trial)***

CDC supports and collaborates on a behavioral intervention trial to lower the risk for HIV and hepatitis C infections in IDUs in Baltimore, Chicago, Los Angeles, New York, and Seattle.





Since 1985 the proportion of reported AIDS cases among women has more than tripled, from 7% in 1985 to 26% in 2001.

### Trends among Heterosexual Adults

Historically, the HIV/AIDS epidemic has affected more men than women, but women are being increasingly affected by HIV/AIDS. Since 1985 the proportion of reported AIDS cases among women has more than tripled, from 7% in 1985 to 26% in 2001.

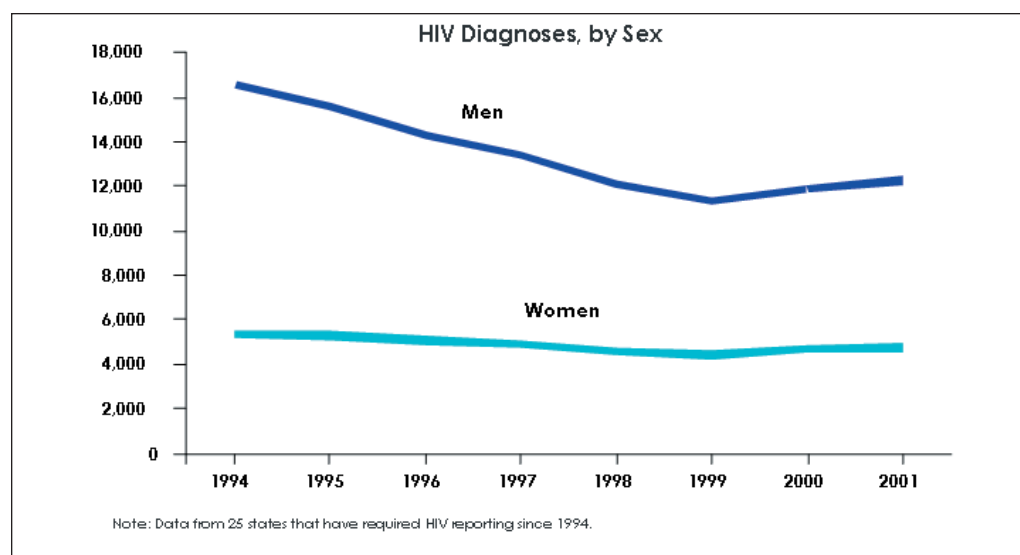
#### AIDS

The epidemic has increased most dramatically among women of color. Although black and Hispanic women together represent less than one fourth of all US women, they account for more than three fourths of AIDS cases reported to date among US women. In 2001 alone, black and Hispanic women represented an even greater proportion (80%) of reported cases in women.

Despite continuing decreases in HIV/AIDS-related deaths among men and women, HIV/AIDS remains the fifth leading cause of death in the United States for men aged 35–44 years and for women aged 25–44. For blacks in these age groups, HIV/AIDS ranks even higher as a cause of death.

#### HIV

Although more men than women become infected with HIV each year, this gap is slowly closing. Data from the 25 states with long-standing HIV reporting show that new HIV diagnoses in men declined 26% from 1994 through 2001.



## How Are They Affected?

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Transmission routes differ by gender.

- ▲ Among men, HIV transmission is estimated to occur 60% through sex with men, 25% through injection drug use, and 15% through sex with women.
- ▲ Among women, HIV transmission is estimated to occur 75% through sex with men (many of whom are IDUs or also have sex with men) and 25% through injection drug use.

### Examples of CDC Programs and Research for Heterosexual Adults

Research has shown that women, as well as men, benefit from HIV prevention programs. Women benefit from programs aimed at increasing personal responsibility, assertiveness in sexual situations, and coping skills.

In its funding of prevention programs for women, CDC emphasizes

- ▲ prevention and treatment services for young women and women of color
- ▲ better integrated prevention and treatment services for all women
- ▲ recognition of the intersection of drug use and sexual HIV transmission, especially among women who trade sex for drugs or money
- ▲ research on effective female-controlled prevention methods for women who are unwilling or unable to negotiate condom use with a male partner
- ▲ programs with a proven record of effectiveness for changing risky behaviors and sustaining those changes over time

Interventions found to be effective include

- ▲ teaching young heterosexual black women about assertiveness, negotiation, and condom use
- ▲ teaching male and female low-income, urban patients at high risk about expectations of outcome, skills, and the belief that one's words and actions will be effective at preventing HIV transmission
- ▲ showing videos on assertiveness, negotiation, and planning skills to promote abstinence and safer behaviors among single, inner-city pregnant women

One of CDC's Strategic Plan objectives for this population is to increase among at-risk sexually active women and at-risk heterosexual men the proportions who consistently engage in behaviors that reduce risk for HIV acquisition or transmission.

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## How Are They Affected?

A CDC strategy that addresses HIV among sexually active women is publication of the *Revised Recommendations for HIV Screening of Pregnant Women*.

### Programs

CDC provides 175 awards to directly funded CBOs that focus primarily on women. Of these 175 awards, 65% focus on blacks; 25%, Hispanics; 5%, whites; 3%, Asians/Pacific Islanders; and 2%, American Indians/Alaska Natives. In terms of age groups, 34% focus on adults; 27%, youth; and 1%, elderly people.

### Research

#### ***Project RESPECT***

Project RESPECT is a large study that evaluated the effectiveness of HIV prevention counseling for changing high-risk sexual behaviors. The 5,758 participants were selected from sexually transmitted disease clinics in Baltimore, Denver, Long Beach, Newark, and San Francisco; about half were women whose risk for HIV was mostly through sex with men. Participants who received 2 one-on-one counseling sessions reported more condom use and had fewer sexually transmitted diseases than those who received only a typical informational message. This type of counseling is now recommended in the *Revised Guidelines for HIV Counseling, Testing, and Referral*.



### Trends among People of Color

People of color are disproportionately affected by the HIV/AIDS epidemic. In the early 1980s, most AIDS cases occurred in whites. However, cases in blacks increased steadily, and by 1996 more cases occurred in blacks than in any other racial or ethnic population. AIDS cases have also increased in Hispanics, Asians, Pacific Islanders, American Indians, and Alaska Natives.

#### AIDS

Although blacks represent a small proportion (12%) of the US population, they accounted for a larger proportion of the cumulative AIDS cases (38%) and AIDS deaths (36%) through 2001. Likewise, Hispanics represent about 12% of the US population, but they accounted for 18% of AIDS cases and 17% of AIDS deaths through 2001.

In terms of risk groups for black men with AIDS, MSM represent 37%; IDUs, 33%; and heterosexuals, 8%. Of risk groups for Hispanic men with AIDS, MSM represent 42%; IDUs, 34%; and heterosexuals, 6%.

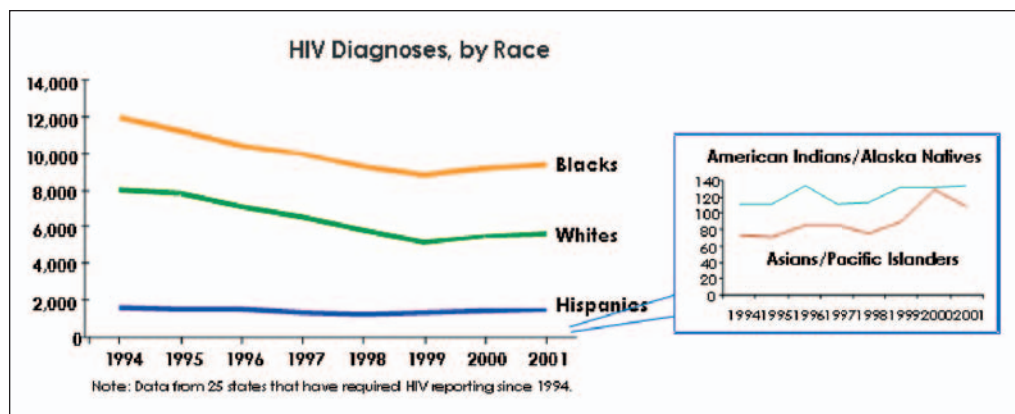
Among black women with AIDS, injection drug use has accounted for 39% of all reported cases and heterosexual contact for 39%. Among Hispanic women with AIDS, heterosexual contact accounts for 47% of cases (most of which are linked to sex with an IDU), and injection drug use accounts for another 38%.

#### HIV

The disparity between black and white people continues. Data from the 25 states with long-standing HIV reporting indicated that 55% of people with a new diagnosis of HIV were black (and not Hispanic), compared with 33% who were white (and not Hispanic). New HIV diagnoses from 1994 through 2001 declined more sharply among whites (30%) than among blacks (22%).

People of color are disproportionately affected by the HIV/AIDS epidemic.

## How Are They Affected?



### Examples of CDC Programs and Research for People of Color

CDC is committed to working with communities of color to ensure that those who have been disproportionately affected by HIV have access to early testing, treatment, and prevention services and programs that work. CDC's careful monitoring of HIV/AIDS by race and ethnicity, risk group, and sex enables communities of color to base their strategies on the best possible understanding of the epidemic. CDC also conducts research to ensure that HIV prevention programs are culturally competent; that is, appropriate for the cultures they serve.

Interventions found to be effective for people of color include

- ▲ using culturally appropriate videos to teach small groups of sexually active black and Hispanic men and women about condom use, negotiation skills, and safer sex
- ▲ teaching health care providers how to work with young black and Hispanic MSM and heterosexuals in prevention activities
- ▲ providing risk-reduction activities; access to HIV counseling, testing, and referral services; and prevention information to black youth
- ▲ training black youth as peer educators in their communities
- ▲ offering HIV counseling and testing services and outreach activities to black churches and offering outreach, discharge planning, community case management, and education services to correctional institutions

The CDC Strategic Plan's overarching national goal focuses on eliminating racial and ethnic disparities in new HIV infections.

CDC activities that address this goal include

- ▲ **Supplemental Funding for Community-based Strategies to Increase HIV Testing of Persons at High Risk in Communities of Color.** These funds support a social network model to increase HIV counseling and testing among high-risk minority communities. According to the model, health care providers ask HIV-infected persons to bring in for testing friends who might also be infected.

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## How Are They Affected?

- ▲ **Research Fellowship on HIV Prevention in Communities of Color.** This program supports the training of scientists researching sociocultural, structural, psychological, and behavioral factors in minority health and HIV.
- ▲ **MARI (Minority HIV/AIDS Research Initiative).** This capacity-building initiative funds investigators working on HIV/AIDS research gaps in black and Hispanic communities.

### Programs

CDC provides more than \$400 million to help communities build and sustain sound, innovative HIV prevention programs. In addition, the Minority AIDS Initiative provides funding to state and local health departments for HIV prevention resources for minority populations at high risk. CDC provides 261 awards to directly funded CBOs that focus primarily on people of color. Of these 261 awards, 63% focus on blacks; 26%, Hispanics; 4%, Asians/Pacific Islanders; and 2%, American Indians/Alaska Natives. In terms of age groups, 33% focus on adults; 25%, youth; and 1%, elderly people.

### Research

#### ***CITY (Community Intervention Trials for Youth)***

CITY seeks to develop and evaluate approaches for encouraging young men who engage in HIV-risk behaviors, especially racial and ethnic minorities, to change these behaviors.





### Trends among Youth

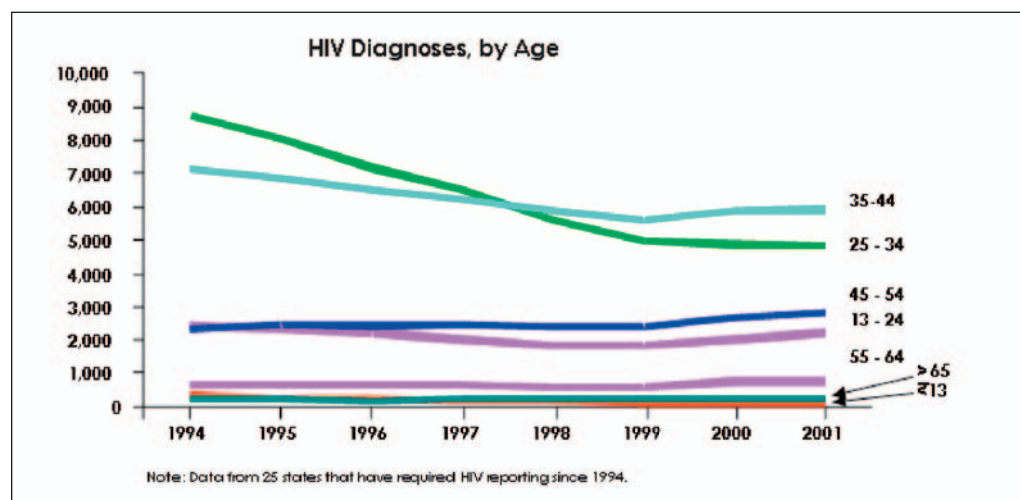
The HIV/AIDS epidemic has taken a heavy toll on young people in the United States. Because it is presumed that young people with HIV were infected fairly recently, scientists believe that HIV infections in youth may indicate trends in the overall HIV/AIDS epidemic. Trends in sexually transmitted diseases other than HIV among young persons serve as indicators of risk behaviors for HIV.

#### AIDS

Since 1981, 9,099 young people (aged 15–24 years) with AIDS are reported to have died. Fortunately, since the late 1980s, deaths from HIV/AIDS have declined almost 80% in people younger than 24. However, the challenges of addressing disparities in care, preventing secondary transmission, and meeting the social and medical needs of persons living with HIV or AIDS are especially critical for youth, considering their long-term needs.

#### HIV

Data from the 25 states with long-standing HIV reporting show that among people aged 25–34 years, the number of new diagnoses declined by a remarkable 44% from 1994 through 2001. However, in youth aged 24 or younger, new HIV diagnoses remained stable during this time period.



The HIV/AIDS epidemic has taken a heavy toll on young people in the United States.

## How Are They Affected?

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Young women and young black men and women are being increasingly affected by HIV. In 2001, data reported from 39 areas with confidential HIV reporting showed that young women account for nearly half (45%) of HIV infections in those aged 13–24. Black youth have been most heavily affected, accounting for 56% of all HIV infections ever reported among those aged 13–24 in areas with confidential HIV reporting.

Young MSM, especially those of color, are also at high risk for HIV infection. The CDC Young Men's Survey showed that from 1994 through 1998, 14% of black MSM and 7% of Hispanic MSM aged 15–22 years were HIV-infected.

### Examples of CDC Programs and Research for Youth

Prevention research has identified many interventions that help young people adopt healthier behaviors. Parents have been shown to be powerful resources for delivering HIV prevention information.

Interventions CDC has found effective with youth include

- ▲ holding small group discussions among young MSM about reducing unsafe sexual behaviors, training others to conduct informal outreach, and conducting a publicity campaign
- ▲ teaching runaway youth safer behaviors through role-playing, reinforcing positive behaviors, and forming support networks
- ▲ teaching students to postpone sex and reduce unsafe sexual and drug-using behaviors

One of CDC's Strategic Plan objectives for this population is to increase among adolescents the proportion who consistently engage in behaviors that reduce risk for HIV acquisition or transmission.

CDC activities that address this goal include

- ▲ **HIV Prevention Projects for Community-based Organizations Targeting Young Men of Color Who Have Sex With Men.** These programs create, put into place, and sustain services to help prevent HIV in young MSM of color, their sex partners, and transgendered youth. They also bring together organizations that serve minority youth.
- ▲ **Pregnancy in Perinatally Infected Youth.** This study looks at teenagers who had acquired HIV from their mothers and are now pregnant and having their own children.
- ▲ **REP (Replicating Effective Programs).** This *prevention in a box* project takes interventions proven effective with specific populations and packages them into kits for use by local HIV prevention agencies. Of the initial set of 5 interventions, 3 served youth.
- ▲ **School-based HIV Prevention.** These programs support 47 state education agencies, 18 large city education agencies, and 42 national nongovernment organizations to help set up school health programs that provide young people with skills and information to avoid or reduce behaviors that put them at risk for HIV infection.

One of CDC's Strategic Plan objectives for this population is to increase among adolescents the proportion who consistently engage in behaviors that reduce risk for HIV acquisition or transmission.

## How Are They Affected?

### Programs

CDC provides 95 awards to directly funded CBOS that focus primarily on youth and provides indirect funding through state, territorial, and local health departments to organizations serving youth. Of these 95 awards, 64% focus on blacks; 26%, Hispanics; 5%, Asians/Pacific Islanders; 3%, whites; and 1%, American Indians/Alaska Natives.



### Research

#### ***Parents Matter!***

This community-based study tests an intervention to promote effective parenting and parent-child communication to reduce sexual risk.

#### ***YMS (Young Men's Survey)***

In 7 cities, YMS measured HIV infection and related risk behaviors of young MSM.

#### ***YWS (Young Women's Survey)***

For 10 years, in New York City and Dallas, the yws examined sexual risk behaviors of young black women.

### Trends among Pregnant Women and Infants

HIV transmission from mother to child (also called perinatal transmission) can occur during pregnancy, labor, delivery, or breast-feeding. Mother-to-child HIV transmission accounts for 91% of all AIDS cases reported among US children.

During the early to mid 1990s, 6,000 to 7,000 HIV-positive women gave birth each year. An estimated 1 in 4 of these newborns acquired the mother's HIV infection. Had this transmission rate continued, an estimated 1,750 HIV-infected infants would have been born in the United States each year. Lifetime medical costs for these perinatally infected individuals are estimated to have approached \$282 million.

Fortunately, however, this trend was successfully interrupted. In 1994 and 1995, the US Public Health Service issued recommendations for preventing mother-to-child HIV transmission.

The recommendations include

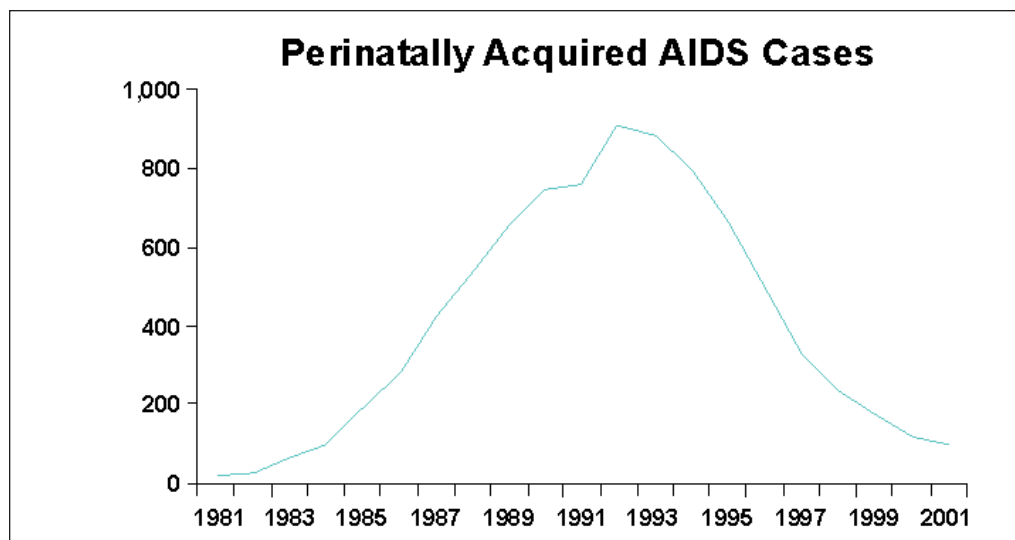
- ▲ routinely offering counseling and voluntary HIV testing to pregnant women
- ▲ offering zidovudine (also called ZDV or AZT) treatment to HIV-infected women during pregnancy and delivery
- ▲ treating the infant with zidovudine after birth

Most pregnant women voluntarily accept HIV testing if it is offered by their health care provider. Testing rates are higher in areas with voluntary *opt-out* policies (in which testing is routine unless a woman chooses to *not* be tested) and mandatory testing of newborns.

During the past decade, the number of US children born with HIV has declined more than 80%. Mother-to-child HIV transmission in the United States dropped from an estimated peak of 1,760 infants born with HIV during 1991 to between 280 and 370 infants in 2000.

During the past decade, the number of US children born with HIV has declined more than 80%.

## How Are They Affected?



However, children of color—especially black children—continue to be disproportionately affected by AIDS. Although only 14% of US children are black, 65% of US children reported with AIDS in 2001 were black.

HIV exposure risks for mothers of children with AIDS have changed over time. In the early 1980s, most women were exposed to HIV through injection drug use and a smaller proportion through sex with men. However, during the 1990s, these proportions reversed; the mother's exposure through sex with men now plays a larger role than the mother's injection drug use.

### Examples of CDC Programs and Research for Pregnant Women and Infants

Efforts to prevent mother-to-child HIV transmission must focus on preventing new HIV infections in women, providing timely prenatal care and HIV testing during pregnancy, developing more effective treatment regimens, and promoting adherence to therapy.

One of CDC's Strategic Plan objectives is to increase the proportion of pregnant women who are tested for HIV and, if infected, choose to take medication to interrupt mother-to-child HIV transmission.

#### Program

##### ***Perinatal Elimination Efforts***

Since 1999, Congress has provided \$10 million a year to reduce mother-to-child HIV transmission in the United States. CDC distributes these funds to

- ▲ 24 state and city jurisdictions for enhanced perinatal surveillance
- ▲ 16 state prevention programs serving pregnant women at high risk for HIV
- ▲ 6 national health care provider organizations to develop training materials for health care providers and educational materials for pregnant women

#### Research

##### ***PACTS (Perinatal AIDS Collaborative Transmission Study)***

Conducted in 4 US cities, PACTS showed that zidovudine treatment for HIV-infected pregnant women increased and that the rate of mother-to-child transmission dropped (from 21% to 5%) after publication of the US Public Health Service guidelines. Currently, PACTS follows up with enrolled HIV-infected children to learn how they are doing emotionally, physically, and to help them take their medications as prescribed.

##### ***EPS (Enhanced Perinatal Surveillance)***

Data collected from 4 sites from 1993 to 1996 showed that the proportion of pregnant women voluntarily tested for HIV increased from 68% to 81% and that the percentage of HIV-infected pregnant women offered zidovudine treatment increased from 27% to

One of CDC's Strategic Plan objectives is to increase the proportion of pregnant women who are tested for HIV and, if infected, choose to take medication to interrupt mother-to-child HIV transmission.

## How Are They Affected?

85%. More recent data from 24 sites in 1999 and 2000 show that the proportion of HIV-infected pregnant women offered zidovudine (either alone or in combination with other antiretroviral drugs) at the time of delivery increased from 70% to 72% and that the proportion of HIV-infected pregnant women who received their HIV diagnosis prior to or during pregnancy increased from 88% in 1999 to 90% in 2000.

### ***MIRIAD (Mother Infant Rapid Intervention at Delivery)***

MIRIAD studies the feasibility of using rapid testing during labor and delivery for women whose HIV status is unknown. It is now expanding to include a similar project at sites funded by the National Institutes of Health. This study assesses pregnant women who are at risk for HIV transmission and who have received little, if any, prenatal care and therefore no prenatal HIV counseling and testing. MIRIAD also studies women after delivery to evaluate their receipt of and adherence to therapy for themselves and their exposed children.

### ***PSD (Pediatric Spectrum of Disease)***

PSD is a long-term study in which the charts of HIV-infected and HIV-exposed children are reviewed. Currently, as part of PSD, CDC is conducting a follow-up review at 6 US sites to monitor for any late adverse effects of therapy.





## Trends among Correctional Facility Inmates

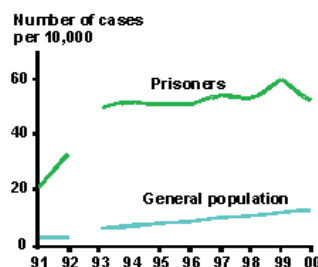
Rates of HIV and AIDS are high among correctional facility inmates; similarly, rates of incarceration are high among HIV-infected people. Many inmates (12% according to a 2002 Supplement to HIV/AIDS Surveillance study) receive their diagnosis of HIV while incarcerated. Each year in the United States, approximately 25% of all people with HIV pass through a correctional facility.

### AIDS

Rates of confirmed AIDS cases for state and federal inmates (52/10,000) are 4 times the rates for the general US population (13/10,000).

Fortunately, effective therapies have led to marked increases in the survival of inmates with AIDS. The number of AIDS-related deaths of inmates has been decreasing dramatically since it peaked in 1995; by 2000, the number of AIDS-related deaths of state inmates had declined 80%. In terms of percentages, AIDS-related deaths in 2000 accounted for 6% of all deaths of state inmates, down from 32% in 1995.

**People Living with AIDS,  
Inmates and General Population**



Note: The classification system for HIV infection and the case definition for AIDS were expanded in 1993. This expansion improved estimates of the number and the characteristics of persons with HIV disease but complicated interpretation of AIDS trends. The increase in reported AIDS cases in 1993 was largely the consequence of the added surveillance criteria.

Adapted from *Bureau of Justice Statistics Bulletin*, October 2002.

## How Are They Affected?

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### HIV

HIV infection in inmates is nearly 5 times higher than in the total US population. In 2000, the highest rates of HIV infection for inmates occurred in the Northeast, where 5.2% of the prison population were HIV-infected, followed by 2.3% in the South, 1.1% in the Midwest, and 0.09% in the West. A greater percentage of female (3.6%) than male (2.2%) inmates were HIV-infected.

Rates of HIV and AIDS are high among correctional facility inmates; similarly, rates of incarceration are high among HIV-infected people.

### Examples of CDC Programs and Research for Correctional Facility Inmates

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Trends in HIV and AIDS in correctional facilities affect not only inmates but the general public because many inmates (approximately 12 million per year) are released back into the community. However, most correctional facilities have inadequate or no discharge planning (plans for linking released inmates with community-based health care, substance abuse treatment, and other services). CDC uses a community approach to improve the health of inmates by collaborating with correctional facilities, public health agencies, and community health care and social service providers. Because approximately 80% of prisoners have a history of substance use, some HIV prevention programs for inmates focus on IDUS.

#### **Program**

##### ***CDC/HRSA Corrections Demonstration Project***

CDC and the Health Resources and Services Administration (HRSA) jointly fund 7 states for this project. Its purpose is to develop, set up, and evaluate models for innovative programs to provide continuity of care (follow-up care after release). Using outreach, HIV education, and HIV/AIDS counseling and testing, the project serves inmates, especially racial and ethnic minorities, who are HIV-infected or at risk for HIV infection. The project encourages collaborations between correctional facilities, public health agencies, CBOS, and health care providers.

#### **Research**

##### ***CDC Corrections Discharge Planning Study***

CDC funds this study of discharge planning and continuity of care for HIV-infected releasees in 10 states. Questionnaires and follow-up phone interviews identify state-of-the-art practices as well as factors that help or hinder discharge planning and continuity of care. The study will identify core issues that affect this care. Findings will guide future funding and program design.

##### ***Arrestee Drug Abuse Monitoring (ADAM)***

The National Institute of Justice and CDC have been collaborating on an HIV addendum to the ADAM program, which obtains information

## How Are They Affected?

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from arrestees in 35 cities. Information is collected about sexual behavior, needle sharing, HIV testing, history of other diseases, and exposure to HIV prevention messages. CDC provides support to analyze the data collected in this program.



### Trends among People Worldwide

HIV and AIDS pose one of the greatest challenges to global public health. Worldwide in 2002, more than 3 million people died from AIDS. During that same year, an estimated 5 million people acquired HIV, bringing the number of people living with HIV to 42 million. Especially vulnerable are disadvantaged, marginalized, and unempowered populations such as commercial sex workers, IDUs, MSM, women and girls, and people living in poverty. Many people do not know that they carry the virus. Millions more know nothing or too little about HIV to protect themselves against it. Even those who do know about HIV prevention may not have the power to act on it, especially women and girls, who are often unable to say no to unprotected sex or to negotiate safer behaviors.

#### Sub-Saharan Africa

(Approximately 29.4 million people living with HIV/AIDS, 3.5 million new infections in 2002). HIV/AIDS is the leading cause of death in sub-Saharan Africa. In 2002 alone, AIDS killed 2.4 million African people. Without adequate treatment and care, most of those living with HIV will not survive the next decade.

#### Asia and the Pacific

(Approximately 7.2 million people living with HIV/AIDS, 1 million new infections in 2002). New infections increased 10% since 2001. The epidemic claimed 490,000 lives in 2002. High HIV infection rates in the region are being discovered among IDUs, MSM, and sex workers.

#### Latin America and the Caribbean

(Approximately 1.9 million people living with HIV/AIDS, 210,000 new infections in 2002). Driving the spread of HIV are unequal socioeconomic development and a highly mobile population. The region, however, has made admirable progress in providing treatment and care.

#### Western Europe, North America, Australia, and New Zealand

(Approximately 1.5 million people living with HIV/AIDS, 76,000 new infections in 2002). A larger epidemic threatens to develop in high-income countries. Unsafe sex and widespread injection drug use

HIV and AIDS pose one of the greatest challenges to global public health.

## How Are They Affected?

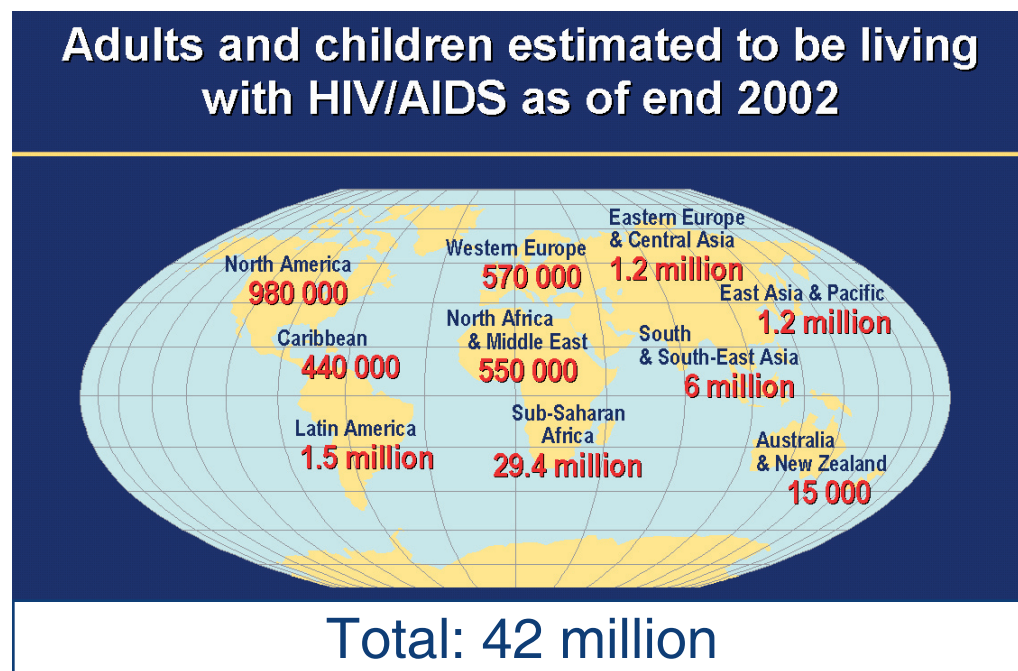
are propelling these epidemics, which are shifting more toward underprivileged communities.

### Eastern Europe and Central Asia

(Approximately 1.2 million people living with HIV/AIDS, 250,000 new infections in 2002). Eastern Europe—especially the Russian Federation—continues to experience the fastest growing epidemic in the world. With high levels of other sexually transmitted diseases and high rates of injection drug use among young people, the epidemic may grow considerably.

### The Middle East and North Africa

(Approximately 550,000 people living with HIV/AIDS, 83,000 new infections in 2002). Poor surveillance systems in several countries hinder accurate assessment of and response to the epidemic.



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## Examples of CDC Programs and Research for People Worldwide

For many years, CDC has been working with others to fight HIV/AIDS around the world. The international goal of CDC's Strategic Plan is to assist in reducing HIV transmission and improving HIV/AIDS care and support in partnership with resource-constrained countries.

### Program

#### ***CDC's Global AIDS Program (GAP)***

CDC's Divisions of HIV/AIDS Prevention provide support and technical assistance for GAP. GAP was first funded in late 1999 and, as of 2003, has bilateral assistance programs in 25 countries in Africa, Asia, Latin America, and the Caribbean. Regional and US-based technical assistance is also available to help meet the needs of some nonaffiliated countries. GAP provides assistance directly through its own staff and through partnership with governments, communities, and national and international entities. It is a major partner in the President's Initiative for reducing mother-to-child transmission of HIV in Africa and the Caribbean and the larger Emergency Plan for AIDS Relief.

GAP's mission is to

- ▲ prevent HIV infections
- ▲ improve care and treatment of people with HIV/AIDS
- ▲ strengthen the capacity of countries to manage HIV/AIDS programs

GAP's priority areas include

- ▲ providing support for HIV/AIDS surveillance systems
- ▲ enhancing voluntary counseling and testing programs and services
- ▲ strengthening laboratory capacities and systems
- ▲ developing programs for people living with HIV/AIDS
- ▲ reducing mother-to-child HIV transmission
- ▲ training program staff, both government and nongovernment

The international goal of CDC's Strategic Plan is to assist in reducing HIV transmission and improving HIV/AIDS care and support in partnership with resource-constrained countries.

## How Are They Affected?

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### Research

The focus of CDC's international HIV research is developing and testing potential HIV vaccines and microbicides, as well as looking for new ways to reduce mother-to-child HIV transmission. CDC is also involved in providing technical support for programs working with drugs for HIV treatment, both to improve care for people with HIV and to prevent HIV transmission from mother to child. CDC's international HIV/AIDS research is mostly conducted in GAP field stations with staff assigned to Botswana, Kenya, and Thailand. In addition, CDC is involved in collaborative research projects in Cameroon, Malawi, Russia, South Africa, Uganda, and Zimbabwe.

